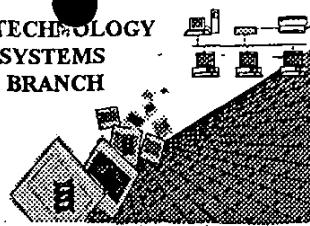


## RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/091,166A  
Source: O1PE  
Date Processed by STIC: 6/28/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name,  
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,  
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,  
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

**Raw Sequence Listing Error Summary**

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	<u>SERIAL NUMBER:</u> <u>10/091,166A</u>
-----------------------	-----------------------------	--

**ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE**

- 1  Wrapped Nucleic  
Wrapped Aminos      The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2  Invalid Line Length      The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3  Misaligned Amino  
Numbering      The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4  Non-ASCII      The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5  Variable Length      Sequence(s) \_\_\_\_\_ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6  PatentIn 2.0  
"bug"      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) \_\_\_\_\_. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7  Skipped Sequences  
(OLD RULES)      Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8  Skipped Sequences  
(NEW RULES)      Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9  Use of n's or Xaa's  
(NEW RULES)      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10  Invalid <213>  
Response      Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11  Use of <220>      Sequence(s) 3 missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12  PatentIn 2.0  
"bug"      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13  Misuse of n      n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



**Does Not Comply  
Corrected Diskette Needed**

OIPE

Error on p. 2

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/091,166A

DATE: 06/28/2002  
TIME: 11:21:14

Input Set : A:\97.44D1.subseqlist.txt  
Output Set: N:\CRF3\06282002\J091166A.raw

```

4 <110> APPLICANT: Adler, David A.
5      Holloway, James L.
6      Baindur, Nand
7      Beigel-Orme, Stephanie
8      Sheppard, Paul O.
10 <120> TITLE OF INVENTION: NOVEL BETA-DEFENSINS
13 <130> FILE REFERENCE: 97-44D1
15 <140> CURRENT APPLICATION NUMBER: US 10/091,166A
16 <141> CURRENT FILING DATE: 2002-03-05
18 <150> PRIOR APPLICATION NUMBER: US 09/636,399
19 <151> PRIOR FILING DATE: 2000-08-10
21 <150> PRIOR APPLICATION NUMBER: US 09/344,097
22 <151> PRIOR FILING DATE: 1999-06-25
24 <150> PRIOR APPLICATION NUMBER: US 09/150,786
25 <151> PRIOR FILING DATE: 1998-09-10
27 <150> PRIOR APPLICATION NUMBER: US 60/064,294
28 <151> PRIOR FILING DATE: 1997-11-05
30 <150> PRIOR APPLICATION NUMBER: US 60/058,335
31 <151> PRIOR FILING DATE: 1997-09-10
33 <160> NUMBER OF SEQ ID NOS: 72
35 <170> SOFTWARE: FastSEQ for Windows Version 4.0
37 <210> SEQ ID NO: 1
38 <211> LENGTH: 219
39 <212> TYPE: DNA
40 <213> ORGANISM: Homo sapiens
42 <220> FEATURE:
43 <221> NAME/KEY: CDS
44 <222> LOCATION: (1)...(195)
46 <400> SEQUENCE: 1
47 atg agg atc cat tat ctt ctg ttt gct ttg ctc ttc ctg ttt ttg gtg 48
48 Met Arg Ile His Tyr Leu Leu Phe Ala Leu Leu Phe Leu Phe Leu Val
49   1           5           10          15
51 cct gtt cca ggt cat gga gga atc ata aac aca tta cag aaa tat tat 96
52 Pro Val Pro Gly His Gly Gly Ile Ile Asn Thr Leu Gln Lys Tyr Tyr
53   20          25          30
55 tgc aga gtc aga ggc ggc cgg tgt gct gtg ctc agc tgc ctt cca aag 144
56 Cys Arg Val Arg Gly Gly Arg Cys Ala Val Leu Ser Cys Leu Pro Lys
57   35          40          45
59 gag gaa cag atc ggc aag tgc tcg acg cgt ggc cga aaa tgc tgc cga 192
60 Glu Glu Gln Ile Gly Lys Cys Ser Thr Arg Gly Arg Lys Cys Cys Arg
61   50          55          60
63 aga aagaaaataaa aaccctgaaa catg 219
64 Arg

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/091,166A

DATE: 06/28/2002

TIME: 11:21:14

Input Set : A:\97.44D1.subseqlist.txt  
 Output Set: N:\CRF3\06282002\J091166A.raw

```

65 65
68 <210> SEQ ID NO: 2
69 <211> LENGTH: 65
70 <212> TYPE: PRT
71 <213> ORGANISM: Homo sapiens
73 <400> SEQUENCE: 2
74 Met Arg Ile His Tyr Leu Leu Phe Ala Leu Leu Phe Leu Phe Leu Val
75 1 5 10 15
76 Pro Val Pro Gly His Gly Gly Ile Ile Asn Thr Leu Gln Lys Tyr Tyr
77 20 25 30
78 Cys Arg Val Arg Gly Gly Arg Cys Ala Val Leu Ser Cys Leu Pro Lys
79 35 40 45
80 Glu Glu Gln Ile Gly Lys Cys Ser Thr Arg Gly Arg Lys Cys Cys Arg
81 50 55 60
82 Arg
83 65
86 <210> SEQ ID NO: 3
87 <211> LENGTH: 31
88 <212> TYPE: PRT
C--> 89 <213> ORGANISM: Artificial
91 <220> FEATURE:
92 <221> NAME/KEY: VARIANT
93 <222> LOCATION: (2)...(7)
94 <223> OTHER INFORMATION: Any amino acid, preferably not cysteine.
96 <221> NAME/KEY: VARIANT
97 <222> LOCATION: (9)...(12)
98 <223> OTHER INFORMATION: Any amino acid, preferably not cysteine.
W--> 100 <221> VARIANT
101 <222> LOCATION: (14)...(20)
102 <223> OTHER INFORMATION: Any amino acid, preferably not cysteine.
W--> 104 <221> VARIANT
105 <222> LOCATION: (22)...(22)
106 <223> OTHER INFORMATION: Any amino acid, preferably not cysteine.
W--> 108 <221> VARIANT
109 <222> LOCATION: (24)...(29)
110 <223> OTHER INFORMATION: Any amino acid, preferably not cysteine.
W--> 112 <400> 3
W--> 113 Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa
114 1 5 10 15
W--> 115 Xaa Xaa Xaa Xaa Gly Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Cys
116 20 25 30
119 <210> SEQ ID NO: 4
120 <211> LENGTH: 213
121 <212> TYPE: DNA
122 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: Degenerate nucleotide encoding the polypeptide of
126 SEQ ID NO:2.
W--> 128 <221> NAME/KEY: misc_feature

```

*Explanation for Artificial  
Sequence was omitted  
see errr summary  
sheet item 11*

RAW SEQUENCE LISTING DATE: 06/28/2002  
 PATENT APPLICATION: US/10/091,166A TIME: 11:21:14

Input Set : A:\97.44D1.subseqlist.txt  
 Output Set: N:\CRF3\06282002\J091166A.raw

```

129 <222> LOCATION: (1)...(213)
130 <223> OTHER INFORMATION: n = a, g, c or t
W--> 132 <400> 4
W--> 133 athcaytayy tnytnttygc nytnytnnty ytnttyytng tnccngtncc nggncaygg 60
W--> 134 ggnathatha ayaacnytnca raartrrrnnn tgymgngtnm gnggngnmng ntgygcngtn 120
W--> 135 ytnwsntgyy tnccnaarga rgarcarath ggnaartgyw snacnmgnng nmgnarta 180
W--> 136 tgymgnmgna araartrraa rccntrraay atg 213
138 <210> SEQ ID NO: 5
139 <211> LENGTH: 20
140 <212> TYPE: DNA
141 <213> ORGANISM: Artificial Sequence
143 <220> FEATURE:
144 <223> OTHER INFORMATION: Oligonucleotide ZC14741
146 <400> SEQUENCE: 5
147 gagcacttcg cgatctgttc 20
149 <210> SEQ ID NO: 6
150 <211> LENGTH: 20
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Oligonucleotide ZC14740
157 <400> SEQUENCE: 6
158 ccaggtcatg gaggaaatcat 20
160 <210> SEQ ID NO: 7
161 <211> LENGTH: 18
162 <212> TYPE: DNA
163 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Oligonucleotide ZC14780
168 <400> SEQUENCE: 7
169 ggaggaatca taaaacaca 18
171 <210> SEQ ID NO: 8
172 <211> LENGTH: 18
173 <212> TYPE: DNA
174 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
177 <223> OTHER INFORMATION: Oligonucleotide ZC14776
179 <400> SEQUENCE: 8
180 gccgatctgt tcctcatt 18
182 <210> SEQ ID NO: 9
183 <211> LENGTH: 438
184 <212> TYPE: DNA
185 <213> ORGANISM: Homo sapiens
187 <220> FEATURE:
188 <221> NAME/KEY: CDS
189 <222> LOCATION: (220)...(420)
191 <400> SEQUENCE: 9
192 acaaattccat agggagctct gccttaccat tgggttccta attaactgag tgagtgggtg 60
193 tttctgtcat ggtgagaggc attggaatga tgcatacgaa aacatgtcat aatgtcatca 120

```

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/10/091,166A

DATE: 06/28/2002  
 TIME: 11:21:14

Input Set : A:\97.44D1.subseqlist.txt  
 Output Set: N:\CRF3\06282002\J091166A.raw

```

194 ctgtaatatg acaagaattg cagctgtggc tggAACCTT ataaagtgc caagcacacc 180
195 tttcatcca gtctcagcgat ggggtgaagc ctagcagct atg agg atc cat tat 234
196 Met Arg Ile His Tyr
197 1 5
199 ctt ctg ttt gct ttg ctc ttc ctg ttt ttg gtgc ctt cca ggt cat 282
200 Leu Leu Phe Ala Leu Leu Phe Leu Phe Leu Val Pro Val Pro Gly His
201 10 15 20
203 gga gga atc ata aac aca tta cag aaa tat tat tgc aga gtc aga ggc 330
204 Gly Gly Ile Ile Asn Thr Leu Gln Lys Tyr Tyr Cys Arg Val Arg Gly
205 25 30 35
207 ggc cgg tgt gct gtgc ctc agc tgc ctt cca aag gag gaa cag atc ggc 378
208 Gly Arg Cys Ala Val Leu Ser Cys Leu Pro Lys Glu Gln Ile Gly
209 40 45 50
211 aag tgc tcg acg cgt ggc cga aaa tgc tgc cga aga aag aaa 420
212 Lys Cys Ser Thr Arg Gly Arg Lys Cys Cys Arg Arg Lys Lys
213 55 60 65
215 taaaaaccct gaaacatg 438
217 <210> SEQ ID NO: 10
218 <211> LENGTH: 67
219 <212> TYPE: PRT
220 <213> ORGANISM: Homo sapiens
222 <400> SEQUENCE: 10
223 Met Arg Ile His Tyr Leu Leu Phe Ala Leu Leu Phe Leu Phe Leu Val
224 1 5 10 15
225 Pro Val Pro Gly His Gly Gly Ile Ile Asn Thr Leu Gln Lys Tyr Tyr
226 20 25 30
227 Cys Arg Val Arg Gly Gly Arg Cys Ala Val Leu Ser Cys Leu Pro Lys
228 35 40 45
229 Glu Glu Gln Ile Gly Lys Cys Ser Thr Arg Gly Arg Lys Cys Cys Arg
230 50 55 60
231 Arg Lys Lys
232 65
235 <210> SEQ ID NO: 11
236 <211> LENGTH: 219
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Degenerate nucleotide sequence encoding the
242 polypeptide of SEQ ID NO:10.
W--> 244 <221> NAME/KEY: misc_feature
245 <222> LOCATION: (1)...(219)
246 <223> OTHER INFORMATION: n = a, g, c or t
W--> 248 <400> 11
W--> 249 atgmgnathc aytayytnyt nttygcnytn ytntyytnt tyytngtncc ngtnccnggn 60
W--> 250 cayggnggna thathaayac nytncaarar trrrnnntgym gngtnmgnngg nggnmgnntgy 120
W--> 251 gcngtnytnw sntgyytnc naargargar carathggna artgywsnac nmgnngnmgn 180
W--> 252 aartgytgym gnmgnaraa rtrraarcn trraayatg 219
254 <210> SEQ ID NO: 12
255 <211> LENGTH: 21

```

RAW SEQUENCE LISTING DATE: 06/28/2002  
 PATENT APPLICATION: US/10/091,166A TIME: 11:21:14

Input Set : A:\97.44D1.subseqlist.txt  
 Output Set: N:\CRF3\06282002\J091166A.raw

```

256 <212> TYPE: DNA
257 <213> ORGANISM: Artificial Sequence
259 <220> FEATURE:
260 <223> OTHER INFORMATION: Oligonucleotide ZC15591
262 <400> SEQUENCE: 12
263 tgccgatctg ttccctccttt g 21
265 <210> SEQ ID NO: 13
266 <211> LENGTH: 25
267 <212> TYPE: DNA
268 <213> ORGANISM: Artificial Sequence
270 <220> FEATURE:
271 <223> OTHER INFORMATION: Oligonucleotide ZC15589
273 <400> SEQUENCE: 13 25
274 gaacaggcac caaaaacagg aagag
276 <210> SEQ ID NO: 14
277 <211> LENGTH: 37
278 <212> TYPE: PRT
279 <213> ORGANISM: Artificial Sequence
281 <220> FEATURE:
282 <223> OTHER INFORMATION: Defensin polypeptide
284 <400> SEQUENCE: 14
285 Gln Lys Tyr Tyr Cys Arg Val Arg Tyr Tyr Arg Cys Ala Val Leu Ser
286 1 5 10 15
287 Cys Leu Pro Lys Glu Glu Gln Ile Tyr Lys Cys Ser Thr Arg Tyr Arg
288 20 25 30
289 Lys Cys Cys Arg Arg
290 35
293 <210> SEQ ID NO: 15
294 <211> LENGTH: 29
295 <212> TYPE: PRT
296 <213> ORGANISM: Artificial Sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: Defensin polypeptide
W--> 301 <221> NAME/KEY: VARIANT
302 <222> LOCATION: (26)...(26)
303 <223> OTHER INFORMATION: leucine, isoleucine, valine, phenylalanine, or
304 methionine
W--> 306 <400> 15
307 Gly Arg Cys Ala Val Leu Ser Cys Leu Pro Lys Glu Glu Cys Ile Gly
308 1 5 10 15
W--> 309 Lys Met Ser Thr Arg Gly Arg Lys Cys Xaa Arg Arg Lys
310 20 25
313 <210> SEQ ID NO: 16
314 <211> LENGTH: 30
315 <212> TYPE: PRT
316 <213> ORGANISM: Artificial Sequence
318 <220> FEATURE:
319 <223> OTHER INFORMATION: Defensin polypeptide
W--> 321 <221> NAME/KEY: VARIANT

```

RAW SEQUENCE LISTING ERROR SUMMARY                   DATE: 06/28/2002  
PATENT APPLICATION: US/10/091,166A               TIME: 11:21:15

Input Set : A:\97.44D1.subseqlist.txt  
Output Set: N:\CRF3\06282002\J091166A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 2,3,4,5,6,7,9,10,11,12,14,15,16,17,18,19,20,22,24,25,26,27  
Seq#:3; Xaa Pos. 28,29  
Seq#:4; N Pos. 12,15,21,24,27,33,39,42,45,48,51,54,60,63,75,78,88,89,90,96  
Seq#:4; N Pos. 99,102,105,108,111,117,120,123,126,132,135,153,162,165,168  
Seq#:4; N Pos. 171,174,186,189,204  
Seq#:11; N Pos. 6,18,21,27,30,33,39,45,48,51,54,57,60,66,69,81,84,94,95,96  
Seq#:11; N Pos. 102,105,108,111,114,117,123,126,129,132,138,141,159,168,171  
Seq#:11; N Pos. 174,177,180,192,195,210  
Seq#:15; Xaa Pos. 26  
Seq#:16; Xaa Pos. 26  
Seq#:17; Xaa Pos. 26  
Seq#:35; Xaa Pos. 45  
Seq#:36; Xaa Pos. 45  
Seq#:37; Xaa Pos. 44  
Seq#:38; Xaa Pos. 44  
Seq#:39; Xaa Pos. 43  
Seq#:40; Xaa Pos. 43  
Seq#:41; Xaa Pos. 42  
Seq#:42; Xaa Pos. 42  
Seq#:43; Xaa Pos. 41  
Seq#:44; Xaa Pos. 41  
Seq#:45; Xaa Pos. 40  
Seq#:46; Xaa Pos. 40  
Seq#:47; Xaa Pos. 39  
Seq#:48; Xaa Pos. 39  
Seq#:49; Xaa Pos. 38  
Seq#:50; Xaa Pos. 38  
Seq#:51; Xaa Pos. 37  
Seq#:52; Xaa Pos. 37  
Seq#:53; Xaa Pos. 36  
Seq#:54; Xaa Pos. 36  
Seq#:55; Xaa Pos. 35  
Seq#:56; Xaa Pos. 35  
Seq#:57; Xaa Pos. 34  
Seq#:58; Xaa Pos. 34  
Seq#:59; Xaa Pos. 33  
Seq#:60; Xaa Pos. 33  
Seq#:61; Xaa Pos. 32  
Seq#:62; Xaa Pos. 32  
Seq#:63; Xaa Pos. 31  
Seq#:64; Xaa Pos. 31  
Seq#:65; Xaa Pos. 30  
Seq#:66; Xaa Pos. 30  
Seq#:67; Xaa Pos. 29

RAW SEQUENCE LISTING ERROR SUMMARY                    DATE: 06/28/2002  
PATENT APPLICATION: US/10/091,166A                    TIME: 11:21:15

Input Set : A:\97.44D1.subseqlist.txt  
Output Set: N:\CRF3\06282002\J091166A.raw

Seq#:68; Xaa Pos. 29  
Seq#:69; Xaa Pos. 28  
Seq#:70; Xaa Pos. 28  
Seq#:71; Xaa Pos. 27  
Seq#:72; Xaa Pos. 27

**Invalid <213> Response:**

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/091,166A

DATE: 06/28/2002

TIME: 11:21:15

Input Set : A:\97.44D1.subseqlist.txt  
 Output Set: N:\CRF3\06282002\J091166A.raw

L:89 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3  
 L:100 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3  
 L:104 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3  
 L:108 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3  
 L:112 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3  
 L:113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
 L:115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:16  
 L:128 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:132 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4  
 L:133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
 L:134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:60  
 L:135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:120  
 L:136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:180  
 L:244 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:248 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:11  
 L:249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
 L:250 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:60  
 L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:120  
 L:252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:180  
 L:301 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:306 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:15  
 L:309 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:16  
 L:321 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:326 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16  
 L:329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:16  
 L:341 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:346 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:17  
 L:349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:16  
 L:650 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:655 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
 L:660 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:32  
 L:674 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:679 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:36  
 L:684 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:32  
 L:696 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:701 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:37  
 L:706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:32  
 L:718 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:723 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:38  
 L:728 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:32  
 L:740 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:745 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:39  
 L:750 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:32  
 L:762 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:767 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:40  
 L:772 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:32  
 L:784 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:789 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:41

VERIFICATION SUMMARY DATE: 06/28/2002  
PATENT APPLICATION: US/10/091,166A TIME: 11:21:15

Input Set : A:\97.44DL.subseqlist.txt  
Output Set: N:\CRF3\06282002\J091166A.raw

L:794 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:32  
L:806 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:811 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:42  
L:816 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:32  
L:828 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:833 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:43  
L:838 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:32  
L:850 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:855 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:44  
L:860 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:32  
L:872 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:877 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:45  
L:882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:32  
L:894 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:899 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:46  
L:904 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:32  
L:916 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:921 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:47  
L:926 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:32  
L:938 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:943 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:48  
L:948 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:32  
L:960 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:965 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:49  
L:970 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:32  
L:982 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:987 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:50  
L:992 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:32  
L:1004 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1009 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:51  
L:1014 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:32  
L:1026 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1031 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:52  
L:1036 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:32  
L:1048 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1053 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:53  
L:1058 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:32  
L:1070 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1075 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:54  
L:1080 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:32  
L:1092 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1097 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:55  
L:1102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:32  
L:1114 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1119 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:56  
L:1124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:32  
L:1136 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1141 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:57  
L:1146 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:32

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PATENT APPLICATION: US/10/091,166A TIME: 11:21:15

Input Set : A:\97.44D1.subseqlist.txt  
Output Set: N:\CRF3\06282002\J091166A.raw

L:1158 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1163 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:58  
L:1168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:32  
L:1180 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1185 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:59  
L:1190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:32  
L:1202 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1207 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:60  
L:1212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:32  
L:1224 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1229 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:61  
L:1232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:16  
L:1246 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1251 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:62  
L:1254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:16  
L:1268 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1273 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:63  
L:1276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:16  
L:1290 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1295 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:64  
L:1298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:16  
L:1312 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1317 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:65  
L:1320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:16  
L:1334 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1339 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:66  
L:1342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:16  
L:1356 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1361 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:67  
L:1364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:16  
L:1378 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1383 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:68  
L:1386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68 after pos.:16  
L:1398 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1403 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:69  
L:1406 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:16  
L:1418 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1423 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:70  
L:1426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:16  
L:1438 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1443 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:71  
L:1446 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:16  
L:1458 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1463 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:72